2/6/12

North Carolina Department of Environment and Natural Resources
Division of Water Quality
Charles Wakild, P.E.
Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

February 6, 2012

Mr. Michael E. Johnson
Environmental Manager
E.I. DuPont de Nemours & Company
22828 NC Highway 87 West
Fayetteville, North Carolina 28306-7332

Subject: Issuance of NPDES Permit
NC0003573
Fayetteville Works
Bladen County
Facility Class III

Dear Mr. Johnson:

Division personnel have reviewed and approved your application for renewal of the subject permit. Accordingly, we are forwarding the attached NPDES discharge permit. This permit is issued pursuant to the requirements of North Carolina General Statute 143-215.1 and the Memorandum of Agreement between North Carolina and the U.S. Environmental Protection Agency dated October 15, 2007 (or as subsequently amended).

The Final Permit contains the following significant changes from the Draft Permit:

- Tertiary filters were removed from the description of the wastewater treatment facilities.
- Classification of the receiving stream was changes to Class C, WS-IV.
- Cooling tower blowdown was added to the description of waste streams.
- Chronic toxicity monitoring requirement was moved to the Outfall 002.

This Final Permit maintains the following changes contained in the Draft Permit:

- One clarifier was added to the description of the treatment facility.
- The permit limits have recalculated based on the latest OCPSF production information in accordance with the 40 CFR 414 Subpart D.
- The limits for Cr, Cu, CN, Pb, Ni, and Zn were added to the permit in accordance with the 40 CFR 414 Subpart D.

1617 Mail Service Center, Raleigh, North Carolina 27699 1617
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-807-6492 \ Customer Service: 1-877-623-6748
Internet: www.ncwaterquality.org

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER QUALITY

PERMIT

TO DISCHARGE WASTEWATER UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended,

E.I. DuPont de Nemours & Co.

is hereby authorized to discharge wastewater and stormwater from a facility located at

DuPont - Fayetteville Works
22828 NC Highway 87
Duart Township
Bladen County

to receiving waters designated as the Cape Fear River in the Cape Fear River Basin in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, and IV hereof.

The permit shall become effective March 1, 2012.

This permit and the authorization to discharge shall expire at midnight on October 31, 2016.

Signed this day February 6, 2012.

Charles Wakild P.E., Director
Division of Water Quality
By Authority of the Environmental Management Commission

A. (1) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge from **Outfall 001**. Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	2.0		Continuous	Recording	Effluent
BOD_5, 20^0 C	182.6 lbs/day	484.7 lbs/day	3/Week	Composite	Effluent
Total Suspended Solids	303.1 lbs/day	981.5 lbs/day	3/Week	Composite	Effluent
Temperature			Weekly	Grab	Effluent
Oil & Grease			Monthly	Grab	Effluent
pH	Between 6.0 and 9.0 Standard Units		3/Week	Grab	Effluent
40 CFR 414 Subpart I	See Condition A. (2)				

THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

A. (2) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - SUBPART I (CONTUNUED)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee shall comply with the limitations and monitoring frequencies established below at outfall 001:

PARAMETER	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average[1]	Daily Maximum[1]	Measurement Frequency	Sample Type	Sample Location
Fluoranthene	0.188	28.2 ug/L	See Note 2	Grab	Effluent
Fluorene	0.166	0.444	See Note 2	Grab	Effluent
Hexachlorobenzene	0.113	0.5 µg/L	Annually[3]	Grab	Effluent
Hexachlorobutadiene	0.151	0.369	See Note 2	Grab	Effluent
Hexachloroethane	0.158	0.406	See Note 2	Grab	Effluent
Methyl Chloride	0.647	1.430	See Note 2	Grab	Effluent
Methylene Chloride	0.301	0.670	See Note 2	Grab	Effluent
Naphthalene	0.166	0.444	See Note 2	Grab	Effluent
Nitrobenzene	0.203	0.512	See Note 2	Grab	Effluent
2-Nitrophenol	0.309	0.519	See Note 2	Grab	Effluent
4-Nitrophenol	0.542	0.933	See Note 2	Grab	Effluent
Phenanthrene	0.166	0.444	See Note 2	Grab	Effluent
Phenol	0.113	0.196	See Note 2	Grab	Effluent
Pyrene	0.188	0.504	See Note 2	Grab	Effluent
Tetrachloroethylene	0.166	0.422	See Note 2	Grab	Effluent
Toluene	0.196	0.602	See Note 2	Grab	Effluent
1,2,4-Trichlorobenzene	0.512	1.054	See Note 2	Grab	Effluent
1,1,1-Trichloroethane	0.158	0.406	See Note 2	Grab	Effluent
1,1,2-Trichloroethane	0.158	0.406	See Note 2	Grab	Effluent
Trichloroethylene	0.158	0.406	See Note 2	Grab	Effluent
Vinyl Chloride	0.783	2.017	See Note 2	Grab	Effluent
Total Chromium	8.355	20.849	Annually	Grab	Effluent
Total Copper	10.914	25.441	Annually	Grab	Effluent
Total Cyanide	3.161	9.032	See Note 2	Grab	Effluent
Total Lead	2.409	5.194	See Note 2	Grab	Effluent
Total Nickel	12.720	29.957	Annually	Grab	Effluent
Total Zinc	7.903	19.645	Annually	Grab	Effluent

Notes:

1. All units are lbs/day unless otherwise noted.
2. Monitoring for the specified parameters has been waived based on a demonstration made by the Permittee in accordance with 40 CFR 122.44(a)(2)(i). This waiver is good only for the term of the permit. Please note that any exceedence of the effluent limitations found herein shall be considered a permit violation subject to appropriate enforcement action.
3. The most sensitive analytical method available shall be employed for determining the presence of hexachlorobenzene in the effluent.

A. (4) CHRONIC TOXICITY PERMIT LIMIT (QUARTERLY) – OUTFALL 002

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to *Ceriodaphnia dubia* at an effluent concentration of 3.3%.

The permit holder shall perform at a minimum, quarterly monitoring using test procedures outlined in the "North Carolina *Ceriodaphnia* Chronic Effluent Bioassay Procedure," Revised February 1998, or subsequent versions or "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions. The tests will be performed during the months of February, May, August, and November. Effluent sampling for this testing shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

If the test procedure performed as the first test of any single quarter results in a failure or ChV below the permit limit, then multiple-concentration testing shall be performed at a minimum, in each of the two following months as described in "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions.

The chronic value for multiple concentration tests will be determined using the geometric mean of the highest concentration having no detectable impairment of reproduction or survival and the lowest concentration that does have a detectable impairment of reproduction or survival. The definition of "detectable impairment," collection methods, exposure regimes, and further statistical methods are specified in the "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the months in which tests were performed, using the parameter code TGP3B for the pass/fail results and THP3B for the Chronic Value. Additionally, DWQ Form AT-3 (original) is to be sent to the following address:

Attention: Environmental Sciences Section
North Carolina Division of Water Quality
1621 Mail Service Center
Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental Sciences Section no later than 30 days after the end of the reporting period for which the report is made.

Test data shall be complete, accurate, include all supporting chemical/physical measurements and all concentration/response data, and be certified by laboratory supervisor and ORC or approved designate signature. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during a month in which toxicity monitoring is required, the permittee will complete the information located at the top of the aquatic toxicity (AT) test form indicating the facility name, permit number, pipe number, county, and the month/year of the report with the notation of "No Flow" in the comment area of the form. The report shall be submitted to the Environmental Sciences Section at the address cited above.

Should the permittee fail to monitor during a month in which toxicity monitoring is required, monitoring will be required during the following month.

Should any test data from this monitoring requirement or tests performed by the North Carolina Division of Water Quality indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival, minimum control organism reproduction, and appropriate environmental controls, shall constitute an invalid test and will require immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.